

REMARKS

Applicant respectfully requests reconsideration of the above referenced application in light of the Remarks that follow. Claims 1-11 are pending in this application.

In the Final Office Action dated December 3, 2007 (the "Final Office Action"), claims 1-11 were rejected under 35 U.S.C. 103(a) as being obvious over U.S. Patent No. 6,964,053 to Ho et. al. (hereinafter referred to as "Ho") in view of U.S. Patent Publication No. 2002/0194181 to Wachtel (hereinafter referred to as "Wachtel").

Applicant respectfully traverses the claim rejections.

The Applicant's Remarks, set forth below, are preceded by related comments in the Office Action set forth in small indented bold-faced type.

Claim Rejections - 35 USC § 103(a)

Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ho et al (US Patent 6,964,053 B2) in view of Wachtel (US Patent Application Pub. No. 2002/0194181 A1).

As per claim 1, Ho discloses [a] computer system for allowing at least two client processes (Fig. 1, col. 10, lines 35-40) to access data through a server process (col. 10, lines 31-33, as common application metamodel (CAM), said server process comprising an application and an engine (Fig. 3, col. 10, lines 44-46, as CAM consists of language metamodels (applicant is an application) and application domain interface metamodel (applicant's engine),

wherein the engine is adapted to receive requests (col. 11, lines 35-40, as these application interface are access points to the applications through which all input and output are connected, these interface are in terms of application interface metamodels) in first language from one of client processes and issuing responses in the first language to said one of client processes (col. 4, lines 5-9, as initiating the transaction on the end user application in a first language to the server), and

the engine is adapted to communicate with the application in a second language distinct from the first language (col. 4, lines 10-14, as converting the transaction to an application written in a different language running on the application server), the second language being an object-oriented language with objects having properties and associated with events (Fig. 4, as Cobol metamodel, C metamodel, col. 4, lines 20-21, col. 10, line 53, col. 14, lines 45-53); and

wherein the engine is adapted to issue responses in the first language to said one of client processes according to the objects instantiated

by the application and to their properties (col. 13, lines 21-42, as populate the data into the original format as previous output form generated by the user, transmitting the transaction output data to the user); and

the engine is adapted to provide updated properties and events to the application in the second language according to requests received in the first language from said one of client processes (col. 15, lines 44-58, as additional language models are added to CAM).

Ho does not explicitly teach, (but Wachtel does teach) an application managing said data and the application is adapted to instantiate objects, to evaluate properties of instantiated objects based on data and to react to events, in response to said engine communicating with said application (para. 0046). Thus, it would have been obvious to one of ordinary skill in the art at the time invention was made to combine the teachings of the cited references to includes an application manages data and to instantiate objects, to evaluate properties of instantiated objects based on data and to react to events as disclosed by Wachtel because the intelligent data assimilation system provides extensibility, free to change without inhibiting another data provider's ontology. Thus, it would enable a high degree of reusability of a Web server's components to fulfill a service requests from different types of data clients.

Final Office Action, pg. 2-4.

Applicant respectfully traverses these rejections. As the MPEP recites:

"To establish a prima facie case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991)."

MPEP § 2142.

Applicant respectfully submits that the Examiner has not established a prima facie case of obviousness because there is no motivation to modify or combine the references' teachings and even if the references were combined, none of the prior art references, alone or in combination, describe or suggest all of the claimed limitations of the present invention.

(a) Even if the references were combined, none of the prior art references, alone or in combination, describe or suggest all of the claimed limitations of the present invention:

Prior to discussion of the merits of the rejections, Applicant respectfully submits that a brief reminder of the principle of Applicant's invention may be helpful.

Overview and principle of Applicant's invention

Applicant respectfully reminds the Office that Applicant's claimed invention is directed to a computerized system for allowing at least two client processes to access data through a server process. Applicant's claimed invention allows data to be shared by the various client processes; in other words, **the same data may be safely accessed and continuously processed at the same time by various client processes.**

As to the physical actors: there is a server process as well as one or two client processes. The server process comprises an application and an engine. This is the application that manages the data to be accessed by the user processes and not the engine. Meanwhile, the engine acts as an interface between user processes and the application.

As to the functioning, the engine may for example receive a request from a client process in a first language. Next, according to this request, the engine provides updated properties or events to the application or queries the application for properties and events. In response to the engine communicating with the application, **the application instantiates objects (of an object oriented language), evaluates properties of instantiated objects based on data and/or reacts to events.** Updated properties or reaction to events are then forwarded by the application to the engine. The engine then provides an answer, in the first language, to the relevant process, based on the information provided by the application.

Accordingly, this allows data to be shared by the various client processes. Therefore **the same data may be safely accessed and processed at the same time by various client processes**, as emphasized above.

Applicant respectfully reminds the Office that in Applicant's claimed invention data are never translated or converted to be accessed by several different client processes.

Applicant respectfully submits that even if Ho and Wachtel were combined, none of the references, alone or in combination, describe or suggest all of the claimed limitations of at least the independent claim of the present invention: claims 1.

As recited by the MPEP:

"The initial burden is on the examiner to provide some suggestion of the desirability of doing what the inventor has done." To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references." Ex parte Clapp, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985)."

MPEP § 2142.

Ho

The Final Office Action sustains the comparison between the server process of Applicant's claim 1 and the Common Application Metamodel (CAM) referred to in Ho, arguing said CAM comprises both an application and an engine (page 2 of the Final Office Action, penultimate para.). Applicant respectfully submits that as previously explained at length in the October 1, 2007 Remarks submitted in response to the previous Office Action (dated March 29, 2007), this is technically not relevant.

Next, Ho is silent about object instantiation at the level of the server application, as acknowledged in the Final Office Action (yet using a different formulation, see page 3, last para., which disregards the fact that the application instantiates objects of an object oriented language used by the engine, not the user processes).

The sole kind of instantiation evoked by Ho relates to the converter (the CAM tool) and not to the server application. This is actually quite consistent with the fact that the invention of Ho is to provide a data converter/translator between existing applications or between a new application and an existing application (hence to integrate new application). This is the reason why Ho relies on a Common Application Metamodel.

Moreover, contrary to a statement in the Final Office Action, Ho does not at all disclose an engine providing

updated properties and events to the application in the second language according to requests received in the first language from said one of client processes.

Applicant's claim 1.

Indeed, such a feature must not be read incompletely and independently but instead in full and together with other features claimed. All this makes it clear that the present invention allows a user to e.g. edit, modify shared (instantiated) data as a continuous process, as may be gathered from claim 1 and as explained at length in the specification.

In contrast, an additional language model being added to the CAM (Ho, col. 15, li. 44 - 58, cited in the Final Office Action) does neither aim at nor permit to achieve this.

Therefore, Ho does not at all provide an engine *to provide updated properties and events to the application in the second language according to requests received in the first language from said one of client processes* (as interpreted together with remaining features of claim 1).

For each of the reasons above, the present invention as claimed in claim 1 is not disclosed by Ho, and not only for the point acknowledged in the Final Office Action in page 3, last paragraph.

Wachtel

Applicant respectfully submits that Wachtel does not cure Ho's defects.

For instance, paragraph 46, cited in the Office Action, recites that

[0046] FIG. 3 is an architecture diagram illustrating an embodiment of an intelligent data assimilation system according to the present invention. An intelligent data assimilation system is coupled to a computer network through the services of an application server (not shown). The intelligent data assimilation system is an object-oriented component-based server platform providing mechanisms and subsystems to create and manipulate a repository 102 of Logical Search Objects (LSOs) that encapsulate knowledge and capabilities used to execute a search for data from a plurality of data providers 104. The intelligent data assimilation system is accessed by a data client via the communications network through the application server.

Wachtel, para. 46.

Applicant respectfully submits that LSOs are in fact software components (see [0048] *A LSO 106 is a [] software component*) which encapsulate knowledge and capabilities used to execute a search for data from a plurality of data providers [par. 46]. In other words, what Wachtel discloses is that logical search objects (LSOs) are used which permits to search data.

Moreover, such LSOs eventually allow to semantically inflate results returned to a user, as recited in paragraph 10, which recites that:

[0010] In one aspect of the invention, a method is provided for fulfilling a data service request. The method includes providing an ontology description of a data service, a first logical search object operably coupled via a first communications link to a data provider. The first logical search object transmits to the data provider via the communications link a search request generated by the first logical search object from the data service request. The first logical search object receives from the data provider via the communications link a data set in response to the search request. The first logical search object generates a knowledge instance from the data set using the ontology description.

Wachtel, para. 10.

Accordingly, LSOs are ultimately here to generate a knowledge instance from a data set, using an ontology and this, consistently with claim 1 of Wachtel as published which recites:

generating by the first logical search object a knowledge instance from the data set using the ontology description.

Wachtel, claim 1.

Paragraph 106 of Wachtel explains the concept of ontology:

[0061] An ontology includes a vocabulary of terms and a specification of what those terms mean. The intelligent data assimilation system ontology provides a set of well-founded constructs that are used to build meaningful higher-level knowledge.

Wachtel, para. 61.

However, in respect to the result of this, the data that are finally returned to the user, Wachtel recites in par. [0042] that:

The data provider server responds to the query by generating and transmitting a data set 31 back to the intelligent data assimilation system. The intelligent data assimilation system populates the ontological instance of the returned data and formats the data set into a formatted data result 33 transmitted to the data client as a response to the service request message.

Wachtel, para. 42.

Thus, a formatted data result is transmitted to the data client but it is never possible for user processes to share said data (and even less to continuously process them).

Hence, while Wachtel makes use of "objects" (i.e. LSOs), such objects are called at runtime to transmit a search request, to receive a data set in response to the search request, and to generate a knowledge instance from the data set using an ontology description.

Finally, what is returned to a user is a "super" result. However, this does not at all allow data to be shared by the various client processes, and in particular, this does not at all make it possible for the same data to be accessed and processed at the same time by various client processes, contrary to the main advantage provided by the invention, as discussed above.

Therefore, be it for this reason, the combination of Ho and Wachtel suggested in the Office Action could not lead to the present claimed invention.

Moreover, neither Ho nor Wachtel allow a user to process (e.g. edit, modify, ...) the shared (instantiated) data as a continuous process. In particular, none of said prior art documents can be said to disclose an engine which provides updated properties and events to the application in the second language according to requests received in the first language from said one of client processes (claim 1).

Rather, what Wachtel provides is adding semantics to search and return data, using an ontology (a vocabulary of terms and a specification of what those terms mean), which has nothing to do with allowing the same data to be accessed and continuously processed at the same time by various client processes (as provided by claim 1).

For at least the foregoing reasons, Applicant respectfully submits that the combination of Ho and Wachtel cannot not lead to the invention of claim 1.

b) There is no motivation to modify or combine the reference teachings:

Applicant respectfully submits that not only the combination of Ho and Wachtel cannot not lead to the present invention, but there is no motivation to modify or combine the reference teachings. Applicant respectfully submits that the combination suggested in the Final Office Action is that of two very different concepts. For instance, there is no technical basis disclosed either in Ho or Wachtel that would tell the skilled person in the art how to couple, tangibly, a Common Application Metamodel (as in Ho) with knowledge instance generated using added ontology. Applicant respectfully submits that Applicant does not detect such a technical basis (which was not at all indicated in the Final Office Action). On the contrary, Applicant respectfully submits that the two concepts seem rather poorly related.

The skilled person has no incentive to perform the alleged combination, and all the more can likely not perform it, practically.

For at least the foregoing reasons, Applicant respectfully submits that Applicant's claim 1 is neither anticipated nor rendered obvious by either Ho or Wachtel, alone or in combination.

Claims 2-11 depend directly or indirectly from independent claim 1, and define further features and structure of the system of the invention. Accordingly, these claims are patentable for at least the same reasons noted above with respect to claim 1 as well as for the additional features recited therein. Accordingly, notice to the effect that dependent claims 2-11 are in condition for immediate allowance is respectfully requested.

CONCLUSION

Claims 1-11 are pending and believed to be in condition for allowance. Applicant respectfully requests that all pending claims be allowed. Applicant has made a diligent effort to place this application in condition for immediate allowance and notice to this effect is earnestly solicited. The Examiner is respectfully requested to reconsider the application at an early date with a view towards issuing a favorable action thereon. If upon the review of the application, the Examiner is unable to issue an immediate notice of allowance, she is respectfully requested to telephone the undersigned representative at the number listed below with a view towards resolving the outstanding issues.

The Commissioner is hereby authorized to apply any credits or excess charges to our Deposit Account number 50-0521.

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Respectfully submitted,



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